

### ABSTRACT OF THE DISCLOSURE

This invention provides with a continuous underground trench excavating method and an excavator for the method, which performs vertical excavation in which a trencher of the excavator is inserted into the ground and horizontal excavation in which a travel body of the excavator is moved substantially horizontally, characterized in that it determines a penetration resistance under penetration of the trencher to a predetermined depth, estimates a ground strength in the underground depth direction on the basis of the penetration resistance, and a continuous underground trench excavating is carried out with a thrust matching the estimated ground strength, whereby capable of carrying out an appropriate excavation with better understanding of the ground condition.